

| | | | |
|-----------------------|--|------------------|------------------|
| Customer | : CU-DAR001 Dart Helicopters Services | Drawing Name | : OH-58 SKIDTUBE |
| Job Number | : 31287 | | |
| Estimate Number | : 10465 | | |
| P.O. Number | : N/A | Part Number | : D058672011 |
| This Issue | : 3/19/2007 S.O. No. : N/A | Drawing Number | : N/A |
| Prsht Rev. | : NC | Project Number | : N/A |
| First Issue | : N/A Type : LANDING GEAR | Drawing Revision | : N/A |
| Previous Run | : 31286 | Material | : N/A |
| Written By | : _____ | Due Date | : 4/10/2007 |
| Checked & Approved By | : _____ | Qty: | 1 Um: Each |
| Comment | : Est Rev:F 02.06.24 Re-format; CHG002 (MPP2251); ECN 258 K J Est Rev:G 07-03-08 As per IIN D058-672 Rev C JLM | | |

Job Number:



1.0 DC DOCUMENT CONTROL



Photo Copy Blue files and Type Labels as per PPP D058-672-011 CHG003

KS 07.03.26

2.0 31287A OH-58 SKIDTUBE ASSEMBLY



| | | |
|-----|-------------|-----------------------|
| 3.0 | PACKAGING 1 | PACKAGING RESOURCE #1 |
|-----|-------------|-----------------------|



Pick Packing Kit

| | | |
|-----|------------|---------------------|
| 4.0 | D058672043 | GROUND HANDLING KIT |
|-----|------------|---------------------|



GROUND HANDLING KIT

Batch: B 3/13/

| | | |
|----|--------|----------------------|
| 50 | D29321 | 206 Saddle Left side |
|----|--------|----------------------|



Pick: Packing Kit

| Qty | Part Number | Description | Batch |
|-----|-------------|-------------|-------|
|-----|-------------|-------------|-------|

2 D2932-1 Saddle

Batch
B.30484 ✓

Form process

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
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| | | | | | | | | |

NOTE: Date & initial all entries

Date: Monday, 3/19/2007 4:28:16 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: OH-58 SKIDTUBE

Job Number: 31287

Part Number: D058672011

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

D29331

206 Saddle Left



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description

Batch

2 D2933-1

Saddle

B29232 ✓

7.0

D2934

Saddle Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description

Batch

2 D2934

Saddle Spacer

B30451 ✓

8.0

D2935

Saddle Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description

Batch

2 D2935

Saddle Spacer

B30946 ✓

9.0

AN341A

Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description

Batch

8 AN3-41A

Bolt

M102472 ✓

10.0

D2652

Bushing



Comment: Qty.: 16.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description

Batch =

16 D2652

Bushing

B31298 ✓

11.0

AN960JD10

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description

Batch

8 AN960JD10

Washer

M103962 ✓

[Handwritten Signature]
3/24/07

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Date: Monday, 3/19/2007 4:28:16 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: OH-58 SKIDTUBE

Job Number: 31287

Part Number: D058672011

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

MS21042L3

Nut



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 MS21042L3 Nut (or -3)

1102658 ✓

13.0

AN510A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN5-10A Bolt

1104093 ✓

14.0

AN512A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN5-12A Bolt

1102658 ✓

15.0

AN960JD516

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 AN960JD516 Washer

1102519 ✓

16.0

AN46A

Bolt



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

12 AN4-6A Bolt

1102115 ✓

17.0

AN960JD416

Washer



Comment: Qty.: 24.0000 Each(s)/Unit Total : 24.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

24 AN960JD416 Washer

1102929 ✓

1102929 ✓

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Date: Monday, 3/19/2007 4:28:17 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: OH-58 SKIDTUBE

Job Number: 31287

Part Number: D058672011

Job Number:



Seq. #:

Machine Or Operation:

Description :

18.0

MS21042L4

Nut



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description

Batch

12 MS21042L4

Nut (or -4)

1103914 ✓

19.0

D2712

Set Screw



Comment: Qty.: 10.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description

Batch

10 D2712

Set Screw

1326481 ✓

20.0

D2968043

Tow Ring



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description

Batch

1 D2968-043

Tow Ring

1329353 ✓

21.0

AN960JD1016

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Washer

Batch:

15519 ✓

22.0

AN9704

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description

Batch

1 AN970-4

Washer

1103344 ✓

23.0

MS21042L4

USE MS21042L4



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

USE MS21042L4

Batch:

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 07/03/01
 QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
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| | | | | | | | | |

NOTE: Date & initial all entries

Date: Monday, 3/19/2007 4:28:17 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: OH-58 SKIDTUBE

Job Number: 31287

Part Number: D058672011

Job Number:



Seq. #:

Machine Or Operation:

Description :

24.0

QC4

INSPECT 100% KITS FOR COMPLETENESS

U of A. 8



Comment: INSPECT 100% KITS FOR COMPLETENESS

6/7/27 (1)

25.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D058-672-011

Location: NUB

6/7/30 (1) E. J. [Signature]

26.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

6/7/5/01

Job Completion



U of A. 501

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

5.0 PARTS LIST

| Item | 672 -011 | 672 -012 | 672 -013 | 672 -014 | 672 -041 | 672 -043 | Part Number | Description |
|------|-------------|-------------|-------------|-------------|-------------|-------------|--------------------------|---------------------------|
| | X | | | | | | D058-672-011 | SKIDTUBE INSTALLATION, LH |
| | | X | | | | | D058-672-012 | SKIDTUBE INSTALLATION, RH |
| | | | X | | | | D058-672-013 | SKIDTUBE INSTALLATION, LH |
| | | | | X | | | D058-672-014 | SKIDTUBE INSTALLATION, RH |
| | 1 | 1 | 1 | 1 | X | | D058-672-041 | REPLACEMENT SKIDTUBE |
| | 1 | 1 | 1 | 1 | | X | D058-672-043 | GROUND HANDLING KIT |
| 1 | | | | | 1 | | D2922-041 | SKIDTUBE ASSEMBLY |
| 2 | | | | | 20 | | D2651-1 | * PLUG |
| 3 | | | | | 20 | | D2651-3 | * O-RING |
| 4 | | | | | 1 | | D2646 | * AFT CAP |
| 5 | | | | | 2 | | MS27039-1-08 | * SCREW |
| 6 | | | | | 2 | | AN960JD10L | * WASHER |
| 7 | | | | | 4 | | D2648-3 | * WEARPAD |
| 8 | | | | | 1 | | D2648-5 (OR D2648-3) | * WEARPAD |
| 9 | | | | | 1 | | D2656-15 | * WEARSHOE |
| 10 | | | | | 1 | | D2656-21 | * WEARSHOE |
| 11 | | | | | 1 | | D2924 | * WEARSHOE |
| 12 | | | | | 50 | | MS27039-1-08 | * SCREW |
| 13 | | | | | 50 | | AN960JD10L | * WASHER |
| 14 | | | | | 50 | | AKS7-1032-130 | * INSERT |
| 20 | 1 | | 1 | | | | D2932-1 | SADDLE OUTSIDE, LH |
| 20 | | 1 | | 1 | | | D2932-2 | SADDLE OUTSIDE, RH |
| 21 | 1 | | 1 | | | | D2933-1 | SADDLE INSIDE, LH |
| 21 | | 1 | | 1 | | | D2933-2 | SADDLE INSIDE, RH |
| 22 | 1 | | | | | | D2932-1 | SADDLE OUTSIDE, LH |
| 22 | | 1 | | | | | D2932-2 | SADDLE OUTSIDE, RH |
| 22 | | | 1 | | | | D2938-1 | SADDLE OUTSIDE, LH |
| 22 | | | | 1 | | | D2938-2 | SADDLE OUTSIDE, RH |
| 23 | 1 | | | | | | D2933-1 | SADDLE INSIDE, LH |
| 23 | | 1 | | | | | D2933-2 | SADDLE INSIDE, RH |
| 23 | | | 1 | | | | D2939-1 | SADDLE INSIDE, LH |
| 23 | | | | 1 | | | D2939-2 | SADDLE INSIDE, RH |
| 24 | 2 | 2 | 2 | 2 | | | D2934 | SADDLE SPACER |
| 25 | 2 | 2 | 2 | 2 | | | D2935 | SADDLE SPACER |
| 26 | 8 | 8 | 8 | 8 | | | AN3-41A | BOLT |
| 27 | 16 | 16 | 16 | 16 | | | D2652 | BUSHING |
| 28 | 8 | 8 | 8 | 8 | | | AN960JD10 | WASHER |
| 29 | 8 | 8 | 8 | 8 | | | MS21042-3 | NUT (OR MS21042L3) |
| 30 | 4 | 4 | 4 | 4 | | | AN5-10A | BOLT |
| 31 | 4 | 4 | 4 | 4 | | | AN5-12A | BOLT |
| 32 | 8 | 8 | 8 | 8 | | | AN960JD516 | WASHER |
| 33 | 12 | 12 | 12 | 12 | | | AN4-6A | BOLT |
| 34 | 24 | 24 | 24 | 24 | | | AN960JD416 | WASHER |
| 35 | 12 | 12 | 12 | 12 | | | MS21042-4 | NUT (OR MS21042L4) |
| 36 | 10 | 10 | 10 | 10 | | | D2712 | SET SCREW |
| 40 | 1 | 1 | 1 | 1 | | | D2707-043 (OR D2968-043) | TOW RING |
| 41 | 1 | 1 | 1 | 1 | | | AN960JD1016 | WASHER |
| 42 | 1 | 1 | 1 | 1 | | | AN970-4 | WASHER |
| 43 | 1 | 1 | 1 | 1 | | | MS21042-4 | NUT (OR MS21042L4) |
| 50 | | | | | | 2 | D3046-041 | LUG BRACKET |
| 51 | | | | | | 4 | AN3-37A | BOLT |
| 52 | | | | | | 8 | D2652 | BUSHING |
| 53 | | | | | | 4 | AN960DJ10 | WASHER |
| 54 | | | | | | 4 | MS21042-3 | NUT (OR MS21042L3) |

* DENOTES THAT PART IS INCLUDED WITH D2922-041 ASSEMBLY

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Revision: C

Date: 06.11.14

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 31287

| | | | |
|-----------------------|--|------------------|-----------------------------|
| Customer | : CU-DAR001 Dart Helicopters Services | Drawing Name | : 0H-58 SKIDTUBE ASSEMBLY |
| Job Number | : 31287A | | |
| Estimate Number | : 10475 | | |
| P.O. Number | : N/A | Part Number | : D058672041 |
| This Issue | : 3/19/2007 S.O. No. : N/A | Drawing Number | : D2922 REV A1 |
| Prsht Rev. | : NC | Project Number | : N/A |
| First Issue | : N/A Type : LANDING GEAR | Drawing Revision | : A1 |
| Previous Run | : 31286A | Material | : PA |
| Written By | : _____ | Due Date | : 4/10/2007 Qty: 1 Um: Each |
| Checked & Approved By | : <u>HJ 02.03.20</u> | | |
| Comment | : Est Rev:C 02.06.28 Re-format; ECN 258 KJ | | |
| | : Est Rev:D 06.02.06 Added Dt8025 EC | | |

Job Number: 

1.0 DC DOCUMENT CONTROL

Photocopy bluefile & type labels per PPP D058-672-041 CHG 001

2.0 D2620 Bent 206 Skidtube

Pick:

| Qty | Part Number | Description | Batch |
|-----|-------------|-------------|-------|
|-----|-------------|-------------|-------|

1 D2620 Bent Tube 3" OD

3.0" LANDING GEAR 1 LANDING GEAR RESOURCE 1

Comment: LANDING GEAR RESOURCE 1

1-Deburr Fwd edge of tube

2-Weld D2794 cap as per QSI 004 and Dwg D2922. Use aluminum rod.

A/R Aluminum Rod

3-Cut aft end of D2620 bent tube as per dwg D2922

4-Drill pilot holes using drill jig DT8480 and DT8025 open to 0

5-Drill holes for wearplates using DT 8487 Open to 0.297" dia.

6-Drill holes for aft cap as per Dwg D2922 using drill jig DT 8025. Open using #6 Drill Bit

8-Remove inner indexing ridge on aft end of skidtubes per Dwg D2922

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Date: Monday, 3/19/2007 4:29:02 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 0H-58 SKIDTUBE ASSEMBLY

Job Number: 31287A

Part Number: D058672041

Job Number:



Seq. #:

Machine Or Operation:

Description :

9-Deburr and Blow out all chips form inside the tube

Pm 07-03-22 ①

4.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Pm 07-03-22 ①



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

5.0

D2923

Web



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

| Qty | Part Number | Description | Batch |
|-----|-------------|-------------|--------|
| 1 | D2923 | Web | B31338 |

Pm 07-03-27 ①

6.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open holes to finished size as per Dwg D2922(without cutting fluid)

Pm 07-03-27 ①

2-Countersink crossbolt spacer holes as per Dwg D2922(without cutting fluid)

Pm 07-03-27 ①

3-Deburr and Blow out all chips from inside the tube

Pmc 07-03-27 ①

4-Bond D2923 web in place as per QSI 015. Ensure holes lineup

A/R Sikaflex-291

m103561

Sikaflex expire date: 07-10-01

Pm 07-03-27 ①

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

M07/03/27 ①

8.0

D2794

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Qty

| Part Number | Description | Batch |
|-------------|-------------|---------|
| 1 D2794 | Fwd Cap | B 14400 |

BE 07-03-22

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|--------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr. | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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| | | | | | | | | |

NOTE: Date & initial all entries

Date: Monday, 3/19/2007 4:29:02 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: OH-58 SKIDTUBE ASSEMBLY

Job Number: 31287A

Part Number: D058672041

Job Number:



Seq. #:

Machine Or Operation:

Description:

9.0

D2649

Crossbolt Spacer



Comment: Qty.: 22.0000 Each(s)/Unit Total: 22.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

22 D2649

Crossbolt spacer

B29329 (9) B31112 (13) BE07-0328

10.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Weld D2649 cross bolt spacers as per QSI 004 and Dwg D2922. (Remember to back drill each hole to 0.250" before welding the other side)

A/R Aluminum Rod

M102421 BE 07-03-28

3-Grind-welds flush as per Dwg D2922

BE 07-03-28 (1)

4-Counterbore 5/16" x 0.750" deep as per Dwg D2922

BE 07-03-28 (1)

11.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

07/03/29

12.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

07/03/29

13.0

POWDER COATING

POWDER COATING



M103706



(1)

Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

M-L 07/04/02

14.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

07/4/02 (1)

15.0

D26483

Wearpad



Comment: Qty.: 5.0000 Each(s)/Unit Total: 5.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

5 D2648-3

Wearpad

B29777

FL 07/04/02 (1)

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Date: Monday, 3/19/2007 4:29:03 PM

User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 0H-58 SKIDTUBE ASSEMBLY

Job Number: 31287A

Part Number: D058672041

Job Number:



Seq. #:

Machine Or Operation:

Description:

16.0

D265615

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description

1 D2656-15 Wearshoe

Batch

B29335

17.0

D265621

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description

1 D2656-21 Wearshoe

Batch

B29198

18.0

D2924

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description

1 D2924 Wearshoe

Batch

B22595

19.0

MS27039108

Screw



Comment: Qty.: 50.0000 Each(s)/Unit Total: 50.0000 Each(s)

Pick:

Qty Part Number Description

50 MS27039-1-08 Screw

Batch

m102630

20.0

AN960JD10L

Washer



Comment: Qty.: 50.0000 Each(s)/Unit Total: 50.0000 Each(s)

Pick:

Qty Part Number Description

50 AN960JD10L Washer

Batch

m102832

FX

07/04/02-①

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Date: Monday, 3/19/2007 4:29:03 PM

User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 0H-58 SKIDTUBE ASSEMBLY

Job Number: 31287A

Part Number: D058672041

Job Number:



Seq. #:

Machine Or Operation:

Description:

21.0

ALS41032130

Insert



Comment: Qty.: 50.0000 Each(s)/Unit Total: 50.0000 Each(s)

Pick:

Qty Part Number Description

Batch

50 ALS4-1032-130 Insert

m103495

or (see QSI 017)

22.0

D26511

Plug



Comment: Qty.: 20.0000 Each(s)/Unit Total: 20.0000 Each(s)

Pick:

Qty Part Number Description

Batch

20 D2651-1 Plugs

B29005 (x10) B30943 (x10)

23.0

D26513

O-Ring



Comment: Qty.: 20.0000 Each(s)/Unit Total: 20.0000 Each(s)

Pick:

Qty Part Number Description

Batch

20 D2651-3 O-Rings

B30815

24.0

D2646

Aft Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description

Batch

1 D2646 Aft Cap

B30119

25.0

MS27039108

Screw



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number Description

Batch

2 MS27039-1-08 Screw

B102630

FL 07/04/02 ①

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Date: Monday, 3/19/2007 4:29:03 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 0H-58 SKIDTUBE ASSEMBLY

Job Number: 31287A

Part Number: D058672041

Job Number:



Seq. #:

Machine Or Operation:

Description:

26.0

AN960JD10L

Washer



Comment: Qty: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number Description Batch
2 AN960JD10L Washer

m102832

FL

07/04/02 ①

27.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts & wearpads as per dwg D2922. Insert a drop of Sikaflex at insert hole before installing wearplates.

A/R Sikaflex-291

Sikaflex expire date: *07/10*

m103497

FL

07/03/02 ①

2-Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install plugs as per Dwg D2922

3-Install D2646 Aft Cap and seal with Sikaflex adhesive. Clean excess adhesive

A/R Sikaflex-291

Sikaflex expire date: *07/10*

m103497

3- Wing Walk as per Dwg D2922 and QSI 005 4.4

m103707

FL

Batch:

07/04/09

①

28.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

29.0

QC5

INSPECT WORK TO CURRENT-STEP



Comment: INSPECT WORK TO CURRENT STEP

30.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

OPP

B 3/28/03

07/4/03 ①

31287A

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
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Part No: PAR #: Fault Category: NCR: Yes No DQA: Date:
 QA: N/C Closed: Date:

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Date: Monday, 3/19/2007 4:29:03 PM

User: • Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: OH-58 SKIDTUBE ASSEMBLY

Job Number: 31287A

Part Number: D058672041

Job Number:



Seq. #:

Machine Or Operation:

Description :

31.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



le 8/10/24

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries



| | | | |
|------------------------|-------------------------|--|------------------------|
| DESIGN RF | DRAWN BY RF | DART AEROSPACE USA, INC. BELLEVUE, WA | |
| CHECKED [Signature] | APPROVED [Signature] | DRAWING NO. D2922 | REV. A SHEET 1 OF 2 |
| DATE 99.10.14 | | TITLE OH-58 SKIDTUBE ASSEMBLY | SCALE NTS |
| A | 99.10.14 | NEW ISSUE | |
| A1 | IP 01.08.20 | Ø0.640 WAS Ø0.625 | |

RELEASED
00.05.11 [Signature]

| Qty | Part Number | Description |
|-----|---|-------------------|
| X | D2922-041 | SKIDTUBE ASSEMBLY |
| * | D2600-1 | EXTRUSION |
| 1 | D2646 | AFT CAP. |
| 4 | D2648-3 | WEARPAD |
| 1 | D2648-5 | WEARPAD |
| 22 | D2649 | CROSS BOLT SPACER |
| 20 | D2651-1 | PLUG |
| 20 | D2651-3 | O-RING |
| 1 | D2656-15 | WEARSHOE |
| 1 | D2656-21 | WEARSHOE |
| 1 | D2794 | CAP |
| 1 | D2923 | WEB |
| 1 | D2924 | WEARSHOE |
| 50 | AKS7-1032-130 or AKS4-1032-130 or ALS7-1032-130 or ALS4-1032-130 | INSERT |
| 52 | AN960JD10L | WASHER |
| 52 | MS27039-1-08 | SCREW |

GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) LENGTH OF D2600-1 EXTRUSION REQUIRED BEFORE BENDING = 160 INCHES.*
- 3) INSERT D2923 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015 AFTER BENDING.
- 4) USE DART DRILL TEMPLATE DT8406 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL AKS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL MS27039-1-08 SCREWS AND AN960JD10L WASHERS IN ALL INSERTS. SEAL WITH SIKAFLEX-241/291.
- 5) WELDING TO BE DONE PER DART QSI 004.
- 6) FINISH:
ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2923 WEB
POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 0.50 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 7) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (20 PLACES).

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 31287A

AKS7-1
P. 80
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 31287A

NO. 99

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name Barclay Elliott
Joint Welding Procedure Tig
Part number and Job number Δ0586 72041 / B3 1008A

TEST WELDS REQUIRED

BASE METAL Alum WELDING PROCESS Tig
Penetration Complete ☐ Partial ☒ Single Weld ☒ Double Weld ☐
Current AC ☒ DC ☐ Backing YES ☐ NO ☒

| | Position | Vertical | Down <input type="checkbox"/> | Up <input type="checkbox"/> |
|--------------|-----------------------------|-----------------------------|-------------------------------|-----------------------------|
| Sheet Groove | 1G <input type="checkbox"/> | 2G <input type="checkbox"/> | 3G <input type="checkbox"/> | 4G <input type="checkbox"/> |
| Tube Groove | 1G <input type="checkbox"/> | 2G <input type="checkbox"/> | 5G <input type="checkbox"/> | 6G <input type="checkbox"/> |
| Sheet Fillet | 1F <input type="checkbox"/> | 2F <input type="checkbox"/> | 3F <input type="checkbox"/> | 4F <input type="checkbox"/> |
| Tube Fillet | 1F <input type="checkbox"/> | 2F <input type="checkbox"/> | 4F <input type="checkbox"/> | 5F <input type="checkbox"/> |

Crossbolt Spacer Welded into Skidtube

TEST RESULTS

Visual Pass ☒ Fail ☐
Penetration Pass ☒ Fail ☐
Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 07/03/20 Qualifier David Newel

Date: Monday, 3/19/2007 4:30:07 PM
 User: Kim Johnston

Process Sheet

| | | | |
|-----------------------|--|------------------|-----------------------------|
| Customer | : CU-DAR001 Dart Helicopters Services | Drawing Name | : OH-58 SKIDTUBE |
| Job Number | : 31288 | | |
| Estimate Number | : 10465 | | |
| R.O. Number | : <i>NIA</i> | Part Number | : D058672011 |
| This Issue | : 3/19/2007 S.O. No. : <i>NIA</i> | Drawing Number | : N/A |
| Prsht Rev. | : NC | Project Number | : N/A |
| First Issue | : <i>NIA</i> Type : LANDING GEAR | Drawing Revision | : N/A |
| Previous Run | : 31287 | Material | : <i>NIA</i> |
| Written By | : | Due Date | : 4/10/2007 Qty: 1 Um: Each |
| Checked & Approved By | : <i>02.03.20</i> | | |
| Comment | : Est Rev: F 02.06.24 Re-format; CHG002 (MPP2251); ECN 258 K J Est Rev: G 07-03-08 As per IIN D058-672 Rev C JLM | | |

Additional Product

Job Number:



| | | |
|---------|-----------------------|---------------|
| Seq. #: | Machine Or Operation: | Description : |
|---------|-----------------------|---------------|

| | | |
|-----|----|------------------|
| 1.0 | DC | DOCUMENT CONTROL |
|-----|----|------------------|



Comment: DOCUMENT CONTROL

Photo Copy Blue files and Type Labels as per PPP D058-672-011 CHG003

02 02.03.26

| | | |
|-----|--------|-------------------------|
| 2.0 | 31288A | OH-58 SKIDTUBE-ASSEMBLY |
|-----|--------|-------------------------|



Comment: Sub-Component OH-58 SKIDTUBE ASSEMBLY

| | | |
|-----|-------------|-----------------------|
| 3.0 | PACKAGING 1 | PACKAGING RESOURCE #1 |
|-----|-------------|-----------------------|



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

| | | |
|-----|------------|---------------------|
| 4.0 | D058672043 | GROUND HANDLING KIT |
|-----|------------|---------------------|



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

GROUND HANDLING KIT

Batch: *B 31/31*

7/4/30 S9

| | | |
|-----|--------|----------------------|
| 5.0 | D29321 | 206 Saddle Left side |
|-----|--------|----------------------|



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D2932-1

Saddle

B 30280

X

7/4/30 S9

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|--------------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries